

# Spilsby Rural District Council.

Medical Officer's Department,

DR. F. J. WALKER,  
MEDICAL OFFICER OF HEALTH,

Spilsby, Febry 12 1897

Dear Sir.

I will send you a copy  
of my Annual Report for the  
Library of the British Medical  
Association as soon as they are  
printed and I will also continue  
to do so whenever they are ordered  
to be printed by the Council.

I am.

Yours faithfully.

Francis J. Walker.







# Report

FOR THE YEAR 1896,

PRESENTED TO THE

## Spilsby Rural District Council

BY

FRANCIS J. WALKER, M.D., L.S.Sc.,

M.R.C.S., Eng.; L.R.C.P., London; L.S.A.,

MEDICAL OFFICER OF HEALTH.

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W. E. PARSONS, PRINTER, MARKET PLACE.

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TO THE

# Spilsby Rural District Council.

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GENTLEMEN,

As your Medical Officer of Health I beg to lay before you my Report for the year ending December 31st, 1896.

An initial difficulty occurs with regard to the Report of this year, owing to the fact that in the month of April the Parish of Alford was made into a separate Urban District Council. By this change the population of our district has been reduced nearly 3000 and the area 1079 acres, consequently all past averages have become useless as bases for future comparisons. Under the circumstances I have deemed it best to make all my calculations as though Alford had been removed at the beginning of the year, and to reserve for a separate paragraph any remarks I may have to make with regard to the eliminated Parish for the three months when it was under my supervision. After adopting this plan,

I find that the Birth-rate and the Death-rate for the year still continue remarkably low, each varying but a few decimal points from that of the previous year.

The first part of my Report will treat of the infectious diseases that have occurred during the year, together with the means taken for preventing their spread; the second, of the various sanitary works that have been accomplished; and the third, of vital statistics.

### EPIDEMIC DISEASES.

MEASLES.—Every year seems to bring some disease especially to the fore, and this year Measles has taken the prominent place. Owing to the fact that this disease is not subject to compulsory notification, it is impossible to give the number of cases that have actually occurred. Suffice it to say that Measles has existed in some part or other of the district throughout the whole of the year, and although the number of cases may have amounted to some hundreds, it is very satisfactory to state that not a single death has been registered under this heading. It has however been found necessary, in order to lessen the spread of the disease, to close the schools in 13 instances. In the early part of the year there were really two diseases prevailing in different parts of the district, which, although distinct, yet owing to close relationship and similitude of symptoms are apt by the inexpert to be confounded as one. I allude to Measles proper or Morbilli, and German Measles or Rotheln. In the table of statistics sent out by the Local Government Board,

and appended to the end of this Report, there is only one column for Measles, the Board evidently not thinking it necessary to distinguish between these two diseases. That they are however non-identical, I have this year had ample opportunities of satisfying myself, for during that time I have watched at least a score of children who have unmistakeably suffered from both complaints, a fact which goes to show that an attack of one disease is no safeguard against an attack of the other, and explains away many of the cases where people are supposed to have had Measles more than once. These two diseases agree in being highly infectious even on the first day of illness, before the appearance of the rash, and this accounts for their rapid spread. A child, perhaps not feeling very well, and no infectious disease being suspected owing to the absence of rash, is sent to school, and subsequently turns out to have been a source of infection to his neighbours.

It has been pretty well established that the most fatal age for Measles is 2 years, and that the disease is much more prevalent in children under 5 years than in those above. It follows then, that, as Dr. Thorne Thorne says "If in any district Measles, which formerly was epidemic every other year, be so far discouraged by preventive measures as to acquire epidemicity every fourth year, it is clear that a larger number of susceptible children will, when the epidemic arrives, have reached ages at which the disease is little fatal, and that in this way many lives will be saved which formerly were sacrificed to



Measles.” The behaviour of our epidemic this year seems in a measure to support this view.

SCARLET FEVER.—It is highly gratifying to find that this disease has not been nearly so prevalent as during the preceding 3 years. Altogether 31 notifications have been received, but most of these referred to isolated cases, and in no instance were they congregated together in sufficient numbers to justify the name of an epidemic. Out of the number of cases notified, in 10 the contagion did not spread beyond the patient first attacked, and in 8 beyond the infected house, while in the remainder it in no instance extended beyond a second dwelling. This I think clearly shows the advantages of early notification, for by it we are enabled promptly to resort to isolation, disinfection, and other sanitary measures. There was but 1 death, that of a child 2 years old.

WHOOPING COUGH —We have heard very little of this disease in the district throughout the year. The only death, and that occurred as far back as March, was in the parish of Bilsby, where Whooping Cough prevailed at the time, having been probably imported from Alford.

DIPHTHERIA.—I received 20 notifications of Diphtheria, but out of these 14 referred to cases which were mild in character and did not spread. The remaining 6 all occurred in one household in the parish of Harrington, among the members of which the disease spread with great rapidity. I am glad to say all these 6 recovered. The only fatal case

during the year was that of a child aged 4, at Friskney.

ENTERIC FEVER.—Four cases of Enteric or Typhoid Fever have been notified, and unfortunately 3 have proved fatal. Two of these fatal cases occurred in Spilsby, though with a considerable interval, one in April, the other in September. Both victims had resided in houses in the Halton Road, a part of the town that in my last Report I recommended should have its drainage improved, and this improvement, I am glad to say, has been carried out during the latter part of the year. The third fatal case occurred at Firsby, and the non-fatal one at Wainfleet. These two latter were solitary, and were followed by no extension of the disease, and in each case after much investigation I failed to find a satisfactory explanation as to the origin of the disease.

ERYSIPELAS.—I received 15 notifications of scattered instances of this disease. This number pretty well tallies with that of each of the previous four years. Most of the cases were mild, and all ended in recovery.

DIARRHOEA.—I heard very little of this disease during the year, and only one death was recorded.

INFLUENZA.—This disease occasionally showed itself in different parts of the district during the year. In form it was generally mild, and there is every hope that it is gradually taking its leave of us. One death, that of an old man aged 74, was recorded under this heading.

In the course of the year I have received 72 notifications of Infectious Diseases, or 36 fewer than during the previous year. This number clearly shows the diminution in the incidence of notifiable diseases, and is far less than the simple removal of Alford can account for. Their distribution under the several headings will be seen in the following table :—

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Typhus Fever.	Enteric or Typhoid Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Total.
1896		31	20			4	1		1		15	72

During the three months that Alford was under my supervision there were 7 births and 12 deaths registered. Three cases of infectious disease were notified, 1 of Diphtheria and 2 of Erysipelas. They were all solitary, and ended in recovery. The most prevalent zymotic disease was Whooping Cough, of which many cases occurred and 3 proved fatal, all of these being children under 2 years of age.

### SANITARY WORK.

SPILSBY.—A very important and somewhat extensive structural work has been effected here during the year. In previous Reports I have drawn attention to the inefficient state of the drainage in the eastern part of the town, which includes Halton Road and Alma Place. The new work consisted in



laying (1) 170 yards of 15-inch pipe sewer from the outfall to a manhole in the Halton Road; (2) from this manhole 290 yards of 9-inch pipe sewer to a manhole at the top of New Town; (3) 70 yards of 12-inch pipe sewer from a manhole near the outfall to a previous drain at the bottom of Alma Place. The works have been planned by and carried out under the supervision of your Surveyor, and are supplied with the necessary lampholes, flushing-penstocks, etc., and there is every reason to hope that a portion of this town hitherto in an unsatisfactory state has been put into a greatly improved sanitary condition.

BURGH.—The sewage disposal ground at Burgh, which was re-laid and re-trenched last year, has been found barely sufficient for the satisfactory filtration of the sewage, especially during wet weather; but this is being remedied by the diversion into natural water courses of the storm water which previously ran into the sewers, and so gave extra work to the engine and surcharged the land.

BILSBY.—In August our attention was called to the condition of the Wold Grift Drain as it passes through the parish of Bilsby, and after inspection I reported to your Authority that in its then state the drain was a nuisance and prejudicial to health, especially to those residing in its immediate vicinity. The perpetrators of the nuisance are clearly the inhabitants of the town of Alford, and it rests with the Authority of that town to mitigate the same.

All we have to do is to safeguard the inhabitants of Bilsby, and protect them from injury, no matter how or by whom caused.

FRISKNEY.—A representation having been made by the Friskney Parish Council to your Authority, requesting that steps should be taken to procure, if possible, a water supply for the parish, operations have been commenced for this purpose by boring, which it is devoutly to be hoped may prove successful, and so supply a most necessary sanitary requirement to the dwellers in this part of the district.

The following is the Surveyor and Inspector's Report for the year 1896.

Number of nuisances reported	...	...	...	149
Number abated without formal notice	...	...	...	51
Number of formal notices served	...	...	...	98
Number unabated at the close of the year	...	...	...	2
Total number abated	...	...	...	147
Number of legal proceedings taken	...	...	...	2
Houses reported unfit for human habitation	...	...	...	4
Houses placed in habitable repair	...	...	...	2
Houses rebuilt	...	...	...	1
Houses pulled down	...	...	...	1
New drainage to houses	...	...	...	12
Defective drainage to houses remedied	...	...	...	35
Houses cleansed and disinfected	...	...	...	26
Old privies removed and new ones erected	...	...	...	4
Old privies repaired and ventilated	...	...	...	3
New earth closets erected	...	...	...	10
New water closets erected	...	...	...	2
New dust bins erected	...	...	...	3
Old dust bins repaired and covered in	...	...	...	6
Cases of overcrowding reported	...	...	...	4



Cases of overcrowding abated	...	...	...	4
New water supply to houses	...	...	...	4
Wells sunk for water supply	...	...	...	4
Wells cleansed and water supply improved	...	...	...	7
Samples of water collected for analysis	...	...	...	18
Slaughter-houses inspected	...	...	...	13
Dairies, cowsheds, and milkshops inspected	...	...	...	39
Schools closed by order	...	...	...	13
Schools ventilated and drained	...	...	...	1
Buildings erected under the Byelaws—Spilsby 5, Wainfleet 7, Winthorpe 3, Hundleby 2, Sutton 10, Hogsthorpe 2, Burgh 2	...	...	...	31
Buildings erected in other parts of the district	...	...	...	11

The four cases of overcrowding reported were all abated; in two by the provision of additional accommodation, and in the others by the reduction of the number of inmates.

I have analysed eighteen samples of drinking water collected for analysis, and the results were that in eight cases the water was classed as good, in six suspicious, and in four bad.

Legal proceedings were taken in the following cases—(1) Against a man for exposing fish in Spilsby market, the same being unfit for human food; he was fined £5. (2) Against a man for neglecting to abate overcrowding after receiving due notice; he was fined £1 10s. (3) Against two youths for wilfully damaging tombstones in the Spilsby Cemetery; they were fined £1 4s. 6d. each.

No complaint has been made to me of any offensive trade having been carried on in the district.

## VITAL STATISTICS.

In 1896 the Births were 489, and the Deaths 297. The Birth-rate was 22·76 per 1000 population, and is practically the same as that of last year, and 1·82 below the mean rate of the last ten years 1886—1895. The Death-rate was 13·89, and so maintains the exceptionally low character of that of last year, and is 1·96 below the mean-rate of the last ten years. The average relation of Births to Deaths is 1·6 to 1; for 1896 1·6 to 1.

The Birth-rate in England and Wales in 1896 was 29·7 per 1000 of the population, which is lower than the rate in any other year on record excepting 1894, and 1·3 below the mean rate in the ten years 1886—1895. The Death-rate was 17·1 per 1000, and is lower than the rate of any previous year excepting 1894, and 1·7 below the mean rate in the ten years 1886—1895.

The Births were distributed according to quarters as follows :—

	LEGITIMATE.		ILLEGITIMATE.	
	MALES.	FEMALES.	MALES.	FEMALES.
Quarter ending March 31st	64	63	4	2
Quarter ending June 30th	56	50	4	4
Quarter ending Sept. 30th	62	56	3	5
Quarter ending Dec. 31st	60	51	3	2
	<hr/> 242	<hr/> 220	<hr/> 14	<hr/> 13
Total Legitimate ...	462	Total Males ...	256	
„ Illegitimate ...	27	„ Females ...	233	
Grand Total	<hr/> 489	Grand Total	<hr/> 489	

For purposes of comparison with former reports, I shall follow the same plan as heretofore adopted, and arrange the deaths in two tables. The first gives the percentage according to age, the second the actual number according to class of disease.

Under	1896.				Average per centage for 10 years, 1886-1895.
1 year	.....	46 or 15·49	per cent.	.....	16·68 per cent.
2	„	7	„ 2·36	„	3·86 „
5	„	7	„ 2·36	„	2·81 „
10	„	4	„ 1·35	„	2·56 „
15	„	7	„ 2·36	„	1·70 „
20	„	13	„ 4·38	„	2·33 „
30	„	10	„ 3·37	„	5·18 „
40	„	21	„ 7·07	„	3·78 „
50	„	16	„ 5·39	„	5·45 „
60	„	28	„ 9·43	„	7·66 „
70	„	29	„ 9·76	„	13·22 „
80	„	68	„ 22·89	„	20·12 „
90	„	35	„ 11·78	„	12·39 „
100	„	5	„ 1·68	„	1·90 „
105	„	1	„ ·33	„	

The percentage of deaths under one year which last year was 18·40 or 3·45 above the average of the last ten years, decreased to 15·49 or 1·28 below the average. Out of the 488 Births 46 or 9·42 per cent. died during the first year of life. One death was recorded at the advanced age of 101 and this is the second centenarian who has died in the district during the last ten years.

Class	1896.
I. Zymotic Diseases ... ..	8
II. Cancerous Diseases ... ..	23
III. Tubercular Diseases ... ..	33
IV. Diseases of Brain, &c. ... ..	46
V. „ Heart, &c. ... ..	43
VI. „ Lungs, &c. ... ..	35
VII. „ Stomach, Liver, &c. ... ..	15
VIII. „ Kidneys, &c. ... ..	7
IX. „ Women and Childbirth ... ..	4
X. „ Skin &c. ... ..	0
XI. Debility, Atrophy, and Marasmus ... ..	9
XII. Developmental Diseases ... ..	10
XIII. Old Age ... ..	39
XIV. Violent Deaths ... ..	8
XV. Causes not specified ... ..	7

The eight deaths in the class of Zymotic Diseases were made up of Scarlet Fever 1, Diphtheria 1, Enteric Fever 3, Whooping Cough 1, Diarrhœa 1, and Influenza 1, and these have already been alluded to. The Death-rate per 1000 of the seven principal Zymotic Diseases amounted to ·32.

The Death-rate for England and Wales for the same Zymotic Diseases was 2·18 per 1000 against 1·81 and 2·17 respectively in the preceding two years.



TABLE of DEATHS from the Seven Principal Zymotic Diseases during the last ten years.

	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Small Pox ...	—	—	—	—	—	—	—	—	—	—
Measles ...	8	—	—	1	—	—	4	3	3	—
Scarlet Fever ...	1	3	1	—	2	1	—	5	2	1
Diphtheria ...	1	3	1	—	1	3	—	3	3	1
Whooping Cough ...	1	2	5	13	—	1	8	2	1	1
Fever, Typhus ...	—	—	—	—	—	—	—	—	—	—
” Typhoid or Enteric ...	2	3	—	1	6	1	3	1	2	3
” Other or doubtful ...	1	—	—	—	—	—	1	—	—	—
Diarrhoea and Dysentery ...	—	3	2	—	—	1	3	—	1	1
Total Deaths from the 7 principal Zymotic Diseases ...	14	14	9	15	9	7	19	14	12	7
Deaths from other causes ...	369	416	392	420	442	342	369	310	325	290
Total Deaths ...	383	430	401	435	451	349	388	324	337	297
Death-rate per 1000 Zymotic Diseases	·55	·55	·36	·60	·36	·29	·79	·58	·49	·32
Death-rate per 1000 from all causes	15·17	17·17	16·15	17·67	18·47	14·39	16·10	13·53	13·82	13·89
Death-rate for England and Wales	18·8	17·8	17·9	19·2	20·2	19·0	19·2	16·6	18·7	17·1

From whatever sanitary standpoint we survey the year that has just past, the prospect becomes satisfactory and encouraging. Further experience in the working of the Infectious Diseases (Notification) Act, has served only to justify its existence and demonstrate its utility; much solid structural work has been accomplished; and the Vital Statistics are eminently satisfactory. In every direction evidence is forthcoming that Sanitary organisation with its attendant work is having a telling and favourable effect upon Public Health.

I have the honour to be, Gentlemen,  
Your obedient Servant,

FRANCIS J. WALKER,  
Medical Officer of Health.

SPILSBY,

*January, 1897.*

## APPENDIX.

(A) TABLE of DEATHS during the year 1896, in the SPILSBY Rural Sanitary District; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.  (Columns for Population and Births are in Table B.)	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.						
	At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25.	25 and under 65	65 and upwards
Registration Sub-District.							
SPILSBY .....	107	14	6	1	8	30	48
<i>The Workhouse</i> .....	21	1	...	2	...	7	11
ALFORD .....	41	9	1	2	2	6	21
WAINFLEET.....	52	12	3	1	2	13	21
BURGH .....	47	5	1	4	2	15	20
STICKNEY .....	29	5	3	1	3	9	8
Totals .....	297	46	14	11	17	80	129

TABLE OF DEATHS, ETC.—continued.

MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																						
	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.					Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	Total.
					Typhus.	Enteric or Typhoid.	Continued	Relapsing	Puerperal													
Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..	..	..	14	20
5 upwds	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	12	5	9	..	1	58	87
Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
5 upwds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	1	..	15	20
Under 5	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	7	10
5 upwds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	6	..	1	18	31
Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	11	15
5 upwds	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	5	4	6	..	1	18	37
Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	6
5 upwds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	8	..	..	23	41
Under 5	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	6	8
5 upwds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	3	..	1	11	21
Under 5	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	11	..	..	2	44	60
TL. {	..	..	1	..	..	3	..	..	..	..	..	..	..	1	..	30	21	33	1	4	143	237



(B) TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the SPILSBY Rural Sanitary District; classified according to Diseases, Ages and Localities.

New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.															
NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.		Registered Births. (d.)	Aged under 5 or over 5. (e.)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	FEVERS.					Cholera.	Erysipelas.
	Census, 1891. (b.)	Estimated to middle of 1894. (c.)							Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.		
Registration Sub-District.															
SPILSBY .....	6471	6220	131	Under 5 5 upwds	..	2	1	..	..	2	1	..	..	..	6
The Workhouse ...	—	—	5	Under 5 5 upwds	..	..	..	..	..	..	..	..	..	..	..
ALFORD .....	4241	4149	93	Under 5 5 upwds	..	8	1	..	..	..	..	..	..	..	1
WAINFLEET .....	4937	4794	123	Under 5 5 upwds	..	13	6	..	..	2	..	..	..	..	..
BURGH.....	3678	3448	68	Under 5 5 upwds	..	1	1	..	..	..	..	..	..	..	1
STICKNEY .....	2815	2828	59	Under 5 5 upwds	..	..	1	..	..	..	1	..	..	..	7
Totals .....	22,142	21,439	489	Under 5 5 upwds	..	29	19	..	..	4	1	..	..	..	15

## APPENDIX.

## RAINFALL FOR 1896.

Month.	No. of days on which '01 or more fell.	Amount in inches.	Average for last 21 years.
January .....	16	1·27	2·02
February .....	12	·83	2·00
March .....	25	2·73	1·70
April .....	14	1·13	1·72
May .....	8	1·00	2·02
June .....	13	1·51	2·17
July .....	8	1·97	3·14
August .....	17	1·84	2·73
September .....	21	5·67	2·72
October .....	27	5·39	3·40
November .....	13	1·48	3·06
December .....	26	4·49	2·43
Total .....	200	29·31	



